# ECE 153B Final Project Proposal:

Overview:
Our idea is to create an alarm clock with an LCD screen that will display the current time and date using the RTC as well as the current temperature outside. It will also include an additional button for a snooze button for delaying the current alarm set for 15 minutes (for testing and demonstration purposes we will use 15 seconds). The alarm times will be set in termite using UART. Ideally having the whole system fit into a small chassis like a traditional alarm clock with an external button on the top and the LCD display on the face of the device.

Block Diagram:

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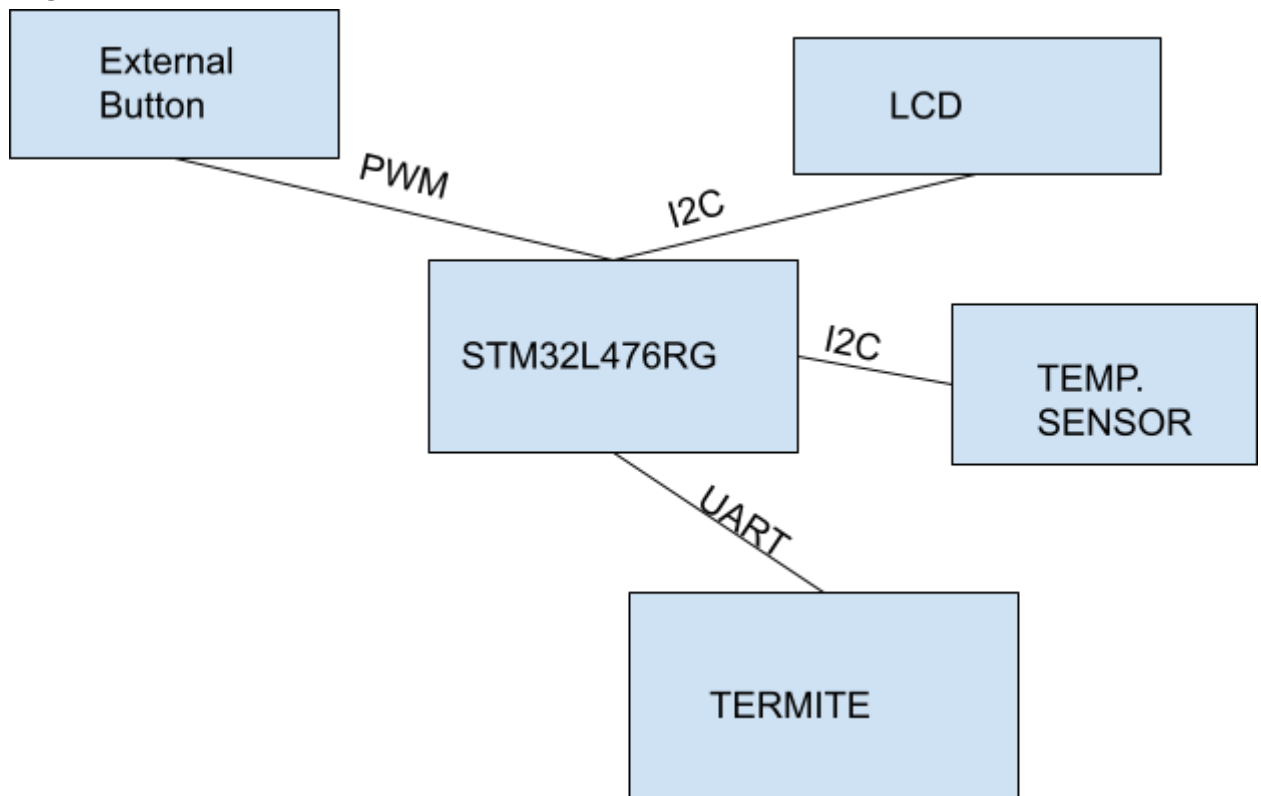
Software Summary:
16x2: LCD Display using I2C
Temperature Sensor using I2C
Termite using UART
Active buzzer using PWM
Alarm times set in termite using UART
- Peripherals: External Button, Active buzzer, Temperature Sensor, LCD
- Serial Interfaces: I2C, UART, PWM

Assigned Rolls:

- Tim Kim: LCD implementation
- John Rollinson: Responsible for implementing the termite alarm system and the temperature sensor. As well as the external "snooze" button.